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EXAMINER

LEE, CHI HO A

ART UNIT	PAPER NUMBER
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2663

27

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/270,297

Applicant(s)

DEO ET AL.

Examiner

Andrew Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,28 and 30-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-48 is/are allowed.
- 6) ☒ Claim(s) 1-6,28,30-35,49 and 52-54 is/are rejected.
- 7) ☒ Claim(s) 36-39,50 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 30, 49 are objected to because of the following informalities:

Claim 30 depends on a cancelled claim 29.

Claim 49, line 6, "second" should be –a second –.

Appropriate correction is required.

Information Disclosure Statement

2. The information disclosure statement filed 7/24/03 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Copies of All Foreign Patent Documents are missing;

Copies of MOTOROLA "MPC860 Power QUICC Technical Summary and IBM Technical Disclosure Bulletin are missing.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites, "downloading in response to the determining, to the hardware platform, software that is specific to the first (& second) type of network services". This limitation is not supported by the original specification. In one instance, Page 9, lines 1-15 discloses that the processor on the hardware platform runs a system's boot code during power up or hard reset to download boot codes to selected processor to execute protocol specific packetization. This "downloading" does not require "in response to the determining of the type of network service" as claimed. At most, each processor located at the cards are pre-configured to operating in a specific protocol, i.e., frame relay, ATM, etc.

In second instance, page 11, lines 4-12, specifically discloses how the "software images" are downloaded into the local memory upon service type recognition by the connection manager 340. However, this does not support how the "connection manager 340" downloads "to the hardware platform" when the "connection manager 340" is part of the "hardware platform". Furthermore, If the processors are already configured with downloaded by software modules; how would the processors differentiate between the software module already resident on the local memory with the newly downloaded by software module to execute the same "service type" conversion.

In page 13, lines 23-26, discloses that the different software modules are made available in the system repository, boot flash memory or "downloadable over the Internet". This provides some supports to "downloading, to the hardware

platform,..", however does not provides sufficient disclosure for enabling "the download of software image based on the determined service type" without undue experimentation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 49, 52-54, 28, and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfeffer U.S. Patent Number 6,128,293 in view of Simone U.S. Patent Number 6,202,090.

Re Claim, 49, Pfeffer teaches in fig. 3, a FSP 14 (a card) comprising a PRA I/F (a line interface unit); Frame Relay I/F (a framer); processor 84 (a second processor); microprocessors in Packet and ATM I/Fs (a plurality of DSPs); wherein processor 84 functions to transfer data between interfaces 68, 70, 72 to PRA interface to be multiplex over the communication line 29 (simultaneously support different types of networking service over a line; a physical line) (See col. 6, lines 12-63).

Pheffer fails to explicitly teach the "a first processor to at least run boot code and the local memory resources to be downloaded into with network service type specific software images".

However, Simone teaches in fig. 2, a CPU 14 (a first processor) and local flash memory (local memory resources) to run boot-routine (boot code) to configuring the

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interfaces with routing protocols (See col. 33-63), that includes once detecting a shutdown event, the shutdown routine uses copy routine to download the contents of main memory to a local flash memory.

One skilled in the art would have been motivated by Simone to modify the teaching Pheffer to include downloading of protocol specific information to relevant interfaces in time of fatal errors recovery (See col. 4, lines 5-62).

Hence, if fatal error occurs in Pheffer, the microprocessors in each problem Interfaces of fig. 3 needs to reconfigure/rebooted with the protocol specific information in its local memory to enable formatting of the information specific to the network service types.

Therefore, it would have been obvious to one ordinary skilled to incorporate the rebooting processor in Simone to card of Pheffer for reliability.

Re Claim 52, refer to Claim 49, the local flash memory (a boot flash memory) coupled to CPU.

Re Claim 53, 54, PCM frame adapter 75 and Packet I/F 70 support protocol conversion between formats in traffic. Examiner takes official notice that IP packets supports VOIP application of PCM traffic. Hence, one skilled in the art would have motivated to used a known IP protocol, such as TCP/IP protocol to support such service.

Re Claim 28, refer to Claim 49, wherein downloading a first, second, third software images refer to the Frame relay, ATM, and Packet protocols at the FSP of Pheffer.

Re Claim 30, refer to Claim 28, wherein the communication line 29 supports multiplexing of network services.

Re Claim 31, refer to Claim 28, wherein the communication line (a physical line) transports Ethernet traffic (framed traffic).

Re Claim 32, refer to Claim 28, wherein FSP is coupled to 29 is part of an ISDN connection within the PSTN network and fails to explicitly teach the T1/E1 physical line. However, Examiner takes official notice that T1 lines are commercially available to networking implementation.

Re Claim 33, wherein the system in Pfeffer supports voice traffic.

Re Claims 34 and 35, fig. 3 of FSP teaches Frame relay & ATM I/Fs.

Allowable Subject Matter

7. Claims 50, 51, 36-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In combination with Claims 49 and 50, prior art fails to explicitly teach the card comprising a TDM switch electrically coupled between the framer and said local memory resource.

As reasoning as above for combination with Claims 28 and 36.

8. Claims 40-48 are allowed.

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Response to Arguments

9. Applicant's arguments with respect to claims 1-6, 28, 30-35, 49-54 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



AI
October 3, 2003.